# **BookletChart**

# Columbia River - Pasco to Richland

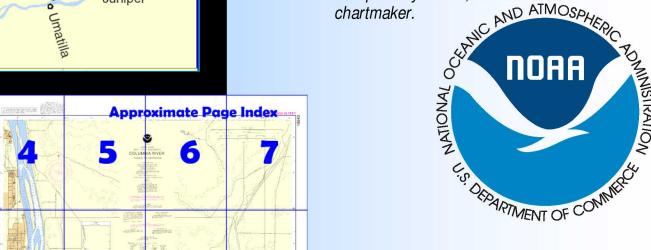
(NOAA Chart 18543)

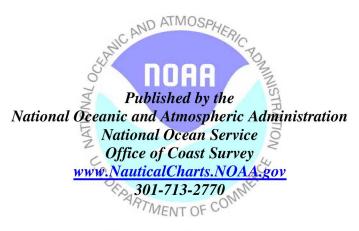


A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ☑ Convenient size
- ☑ Up to date with all Notices to Mariners
- ☑ United States Coast Pilot excerpts

☐ Compiled by NOAA, the nation's chartmaker. AD ATM





# **What are Nautical Charts?**

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

# What is a BookletChart $\stackrel{\text{\tiny TM}}{=}$ ?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <a href="http://www.NauticalCharts.NOAA.gov">http://www.NauticalCharts.NOAA.gov</a>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

### **Notice to Mariners Correction Status**

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 7, Chapter 10 excerpts] (417) Snake River, 283 (325.2) miles above the mouth of Columbia River, rises in Yellowstone National Park, from which it winds S past the Grand Tetons, and thence for some 868 miles to its junction with the Columbia at Pasco, Wash. (418) From that junction for 119 (137) miles to Lewiston, ID there are few small-craft facilities. There are several marinas along the river at Clarkston, WA and Lewiston, ID where berths, gasoline, diesel fuel, water, ice, and marine supplies

may be obtained. The Ports of Clarkston and Lewiston at the confluence of the Snake and Clarkford Rivers are the primary ports along the Snake River and serve the inland agricultural and logging communities of Washington, Idaho, and Oregon. Barge loading facilities and grain terminals are available at both ports.

(419) Near its mouth, at the village of **Burbank**, Snake River is crossed by the Burlington Northern Railroad lift bridge with a clearance of 14 feet down and 60 feet up. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KQ- 9047. About 0.6 (0.7) mile above, there is a fixed highway bridge with a clearance of 61 feet. In February 1985, a new fixed highway bridge with a design clearance of 63 feet was under construction close S of the existing bridge. Numerous overhead cables with a reported minimum clearance of 43 feet cross Snake River between the fixed highway bridge and Ice Harbor Lock and Dam.

(421) Ice Harbor Lock and Dam (9.7) miles above the mouth of the Snake River, has a single lift lock with a vertical lift of about 100 feet. A restricted area (marked by lights, signs, and buoys) is above the dam. In May 1986, shoaling to an unknown depth was reported between Snake River Light 9 and Snake River Buoy 20. Lake Sacajawea, the lake formed by the waters behind Ice Harbor Dam, provides depths at slack water of 10 feet or more for a distance of 27.8 (32) miles to Lower Monumental Dam

(422) **Lower Monumental Lock and Dam** 27.6 (31.8) miles above Ice Harbor Dam and about 36 (41.5) miles above the mouth of the Snake River, has a single lift lock with a vertical lift of about 100 feet. A **restricted area,** marked by lights, signs, and buoys, is above the dam. (423) The Snake River between Lower Monumental Dam and Little Goose Dam, 25 (28.8) miles above Lower Monumental Dam, is crossed by three fixed bridges with a least clearance of 52 feet; overhead power cables crossing the river between the two dams have a least clearance of 90 feet.

(424) Little Goose Lock and Dam, about 25 (28.8) miles above Lower Monumental Dam and about 61.1 (70.3) miles above the mouth of the Snake River, has a single lift lock with a vertical lift of about 98 feet. A restricted area, marked by lights, signs, and buoys, is above the dam. (425) Lake Bryan, the pool formed by Little Goose Dam is crossed by a fixed highway bridge with a clearance of 60 feet about 10.7 (12.3) miles above the dam; overhead power cables with a least clearance of 75 feet cross the lake between Little Goose Dam and Lower Granite Dam. (426) Lower Granite Lock and Dam, about 31.5 (36.8) miles above Little Goose Dam and about 93.4 (107.5) miles above the mouth of the Snake River, has a single lift navigation lock 675 feet long and 86 feet wide. The dam, completed in 1975, permits navigation to Lewiston, Idaho, 120 (138) miles above the mouth of the Snake River. A fixed highway bridge with a clearance of 60 feet crosses Snake River about 1.5 miles below its junction with Clearwater River. A highway lift bridge with clearances of 7 feet down and 60 feet up crosses Clearwater River about 0.35 mile above the junction with Snake River. A fixed highway bridge, about 1.15 miles above the lift bridge, has a clearance of 21 feet. A vertical lift highway bridge with a clearance of 10 feet down and 42 feet up crosses the Snake River between Lewiston, Idaho and Clarkston, Washington. A fixed highway bridge with a clearance of 60 feet is about 1.5 miles above the lift bridge. Overhead power cables with a minimum clearance of 80 feet cross the river between the dam and Lewiston.

HEIGHTS Heights in feet

# Corrected through NM Dec. 20/03 Corrected through LNM Dec. 02/03

For Symbols and Abbreviations see Chart No. 1

### CAUTION

SUBMARINE PIPELINES AND CABLES Charted submarine pipelines and submarine cables and submarine pipeline and cable areas

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme

become exposed. Manners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, draggling, or trawling. Covered wells may be marked by lighted or unlighted buoys.

### HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.513" southward and 4.048" westward to agree with this chart.

### CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

### RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

### NOAA WEATHER RADIO BROADCASTS

NOAA WAATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high clarification. high elevations.

Pendleton, OR WXL-95 162.55 MHz

### SUPPLEMENTAL INFORMATION Consult U.S. Coast Pilot 7 for important supplemental information.

# Mercator Projection

Scale 1:20,000 at Lat. 46°16'30" North American Datum of 1983 (World Geodetic System 1984)

# SOUNDINGS IN FEET

# PLANE COORDINATE GRID

(based on NAD 1927)

Washington State Grid, south zone, is indi-cated by dashed ticks at 4000 foot intervals. The last 3 digits are omitted.

### PRINT-ON-DEMAND CHARTS

PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart
updated weekly by NOAA for Notices to Mariners and
critical corrections. Charts are printed when ordered
using Print-on-Demand technology. New Editions are
available 5-8 weeks before their release as traditional
NOAA charts. Ask your chart agent about Print-on-Demand
charts or contact NOAA at 1-800-584-4683,
http://NauticalCharts.gov, help@NauticalCharts.gov, or
OceanGrafix at 1-877-56CHART, http://OceanGrafix.com,
or help@OceanGrafix.com.

Additional information can be obtained at nauticalcharts.noaa.gov.

### POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

### SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, <u>United States Coast Pilot.</u>

### ALITHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

# **Table of Selected Chart Notes**

### COLLIMBIA RIVER

Mileage distances along the Columbia River are Statute Miles. Distances along the Columbia River are eastward from the mouth and are indicated thus:

Tables for converting Statute Miles to International Nautical Miles are given in the U.S. Coast Pilot 7.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

### CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

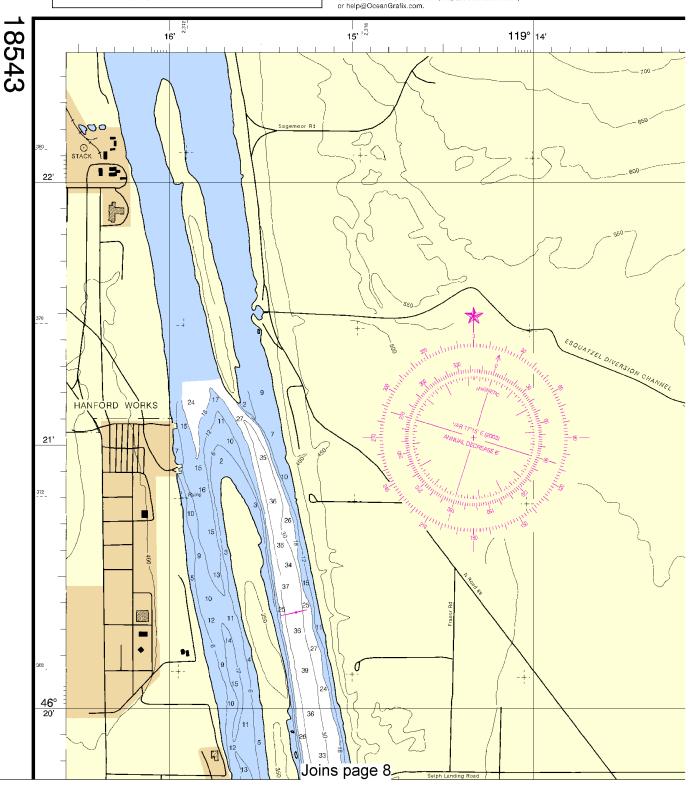
### ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.) Aids to Navigation (lights are white unless otherwise indicated): AERO aeronautical IQ interrupted quick Iso isophase LT HO lighthouse Al alternating Rot rotating N nun OBSC obscured B black Bn beacon s seconds Oc occulting Or orange Q quick R red SEC sector C can DIA diaphone M nautical mile m minutes St M statute miles VQ very quick W white F fixed FI flashing MICRO TR microwave tower Ra Ref radar reflector WHIS whistle Bottom characteristics: Co coral gy gray h hard M mud Blds boulders bk broken Cy clay G gravel Grs grass S sand sy sticky cellaneous: AUTH authorized Subm submerged Obstn obstruction PD position doubtful ED existence doubtful PA position approximate Rep reported .21, Wreck, rock, obstruction, or shoal swept clear to the depth indicated. (2) Rocks that cover and uncover, with heights in feet above datum of soundings.

### PRINT-ON-DEMAND CHARTS

PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafx, offer this chart
updated weekly by NOAA for Notices to Mariners and
critical corrections. Charts are printed when ordered
using Print-on-Demand technology. New Editions are
available 5-8 weeks before their release as traditional
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http://NauticalCharts.gov, help@NauticalCharts.gov, or
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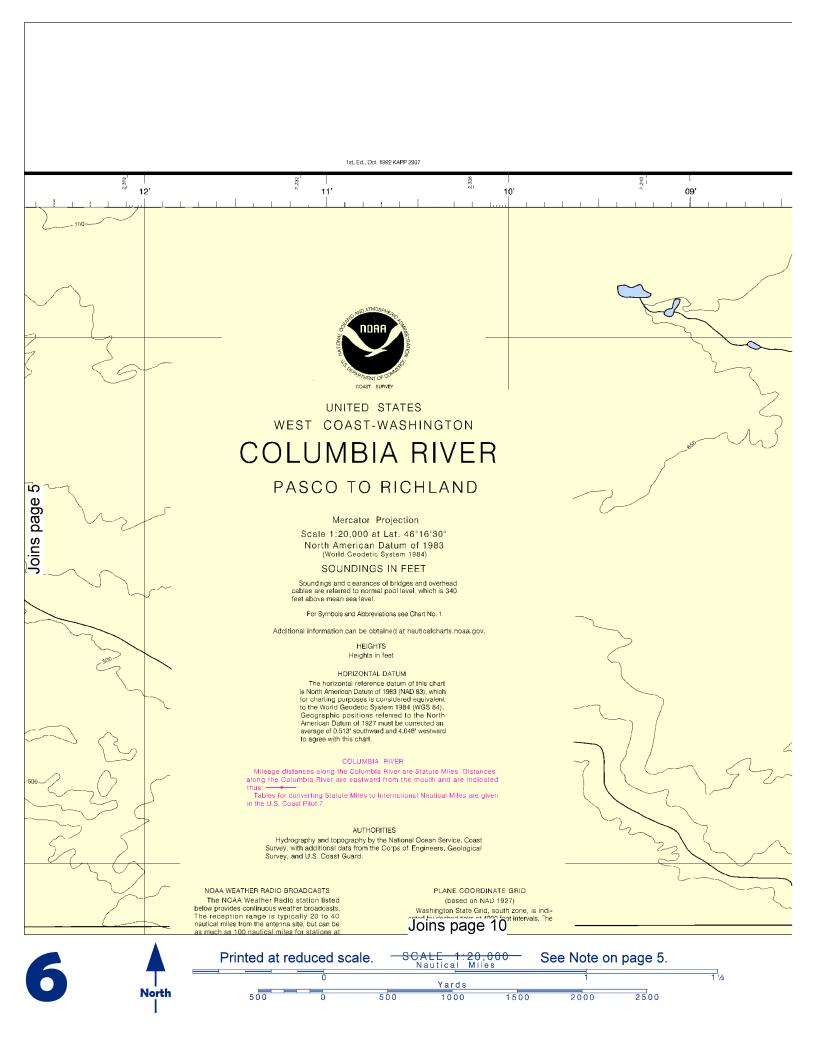
1st. Ed., Oct. 1992 KAPP 2937 2,378 12' 10' UNITED STATES WEST COAST-WASHINGTON COLUMBIA RIVER PASCO TO RICHLAND Mercator Projection Scale 1:20,000 at Lat. 46°16'30" North American Datum of 1983 (World Geodetic System 1984) SOUNDINGS IN FEET Soundings and clearances of bridges and overhead cables are referred to normal pool level, which is 340 feet above mean sea level. For Symbols and Abbreviations see Chart No. 1 Additional information can be obtained at nauticalcharts.noaa.gov. HEIGHTS Heights in feet HORIZONTAL DATUM The horizontal reference datum of this chart The nortical reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.513" southward and 4.048" westward to agree with this chart. COLUMBIA BIVER Mileage distances along the Columbia River are Statute Miles. Distances along the Columbia River are eastward from the mouth and are indicated thus:

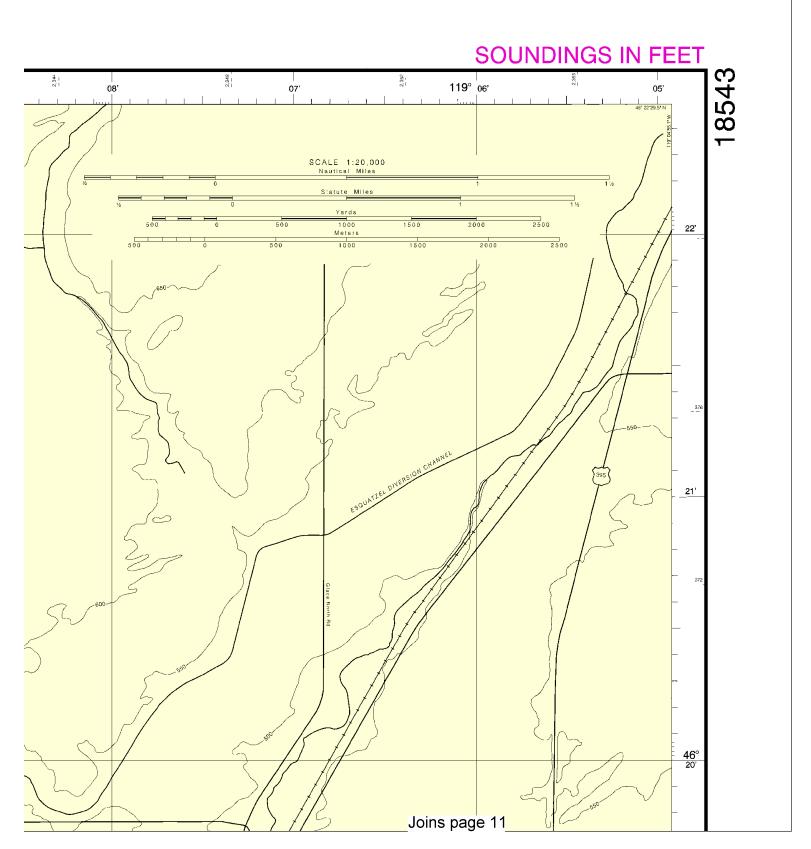
Tables for converting Statute Miles to International Nautical Miles are given in the U.S. Coast Pilot 7. AUTHORITIES Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard. NOAA WEATHER RADIO BROADCASTS PLANE COORDINATE GRID The NOAA Weather Radio station listed (based on NAD 1927) below provides continuous weather broadcasts.

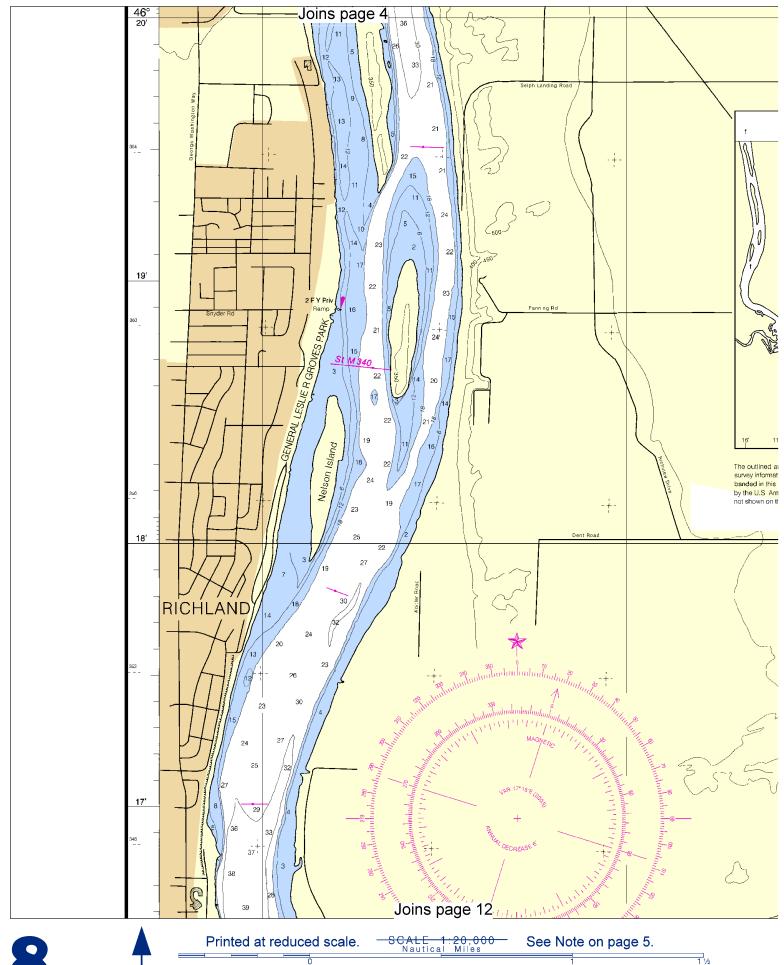
The reception range is typically 20 to 40 naulical miles from the antenna site, 1 Joins page 9

Washington State Grid, south zone, is indicated by dashed ticks at 4000 foot intervals. The last 3 digits are omitted. This BookletChart was reduced to 75% of the original chart scale.

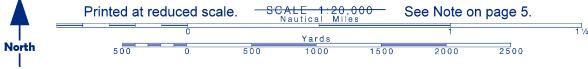
This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:26667. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

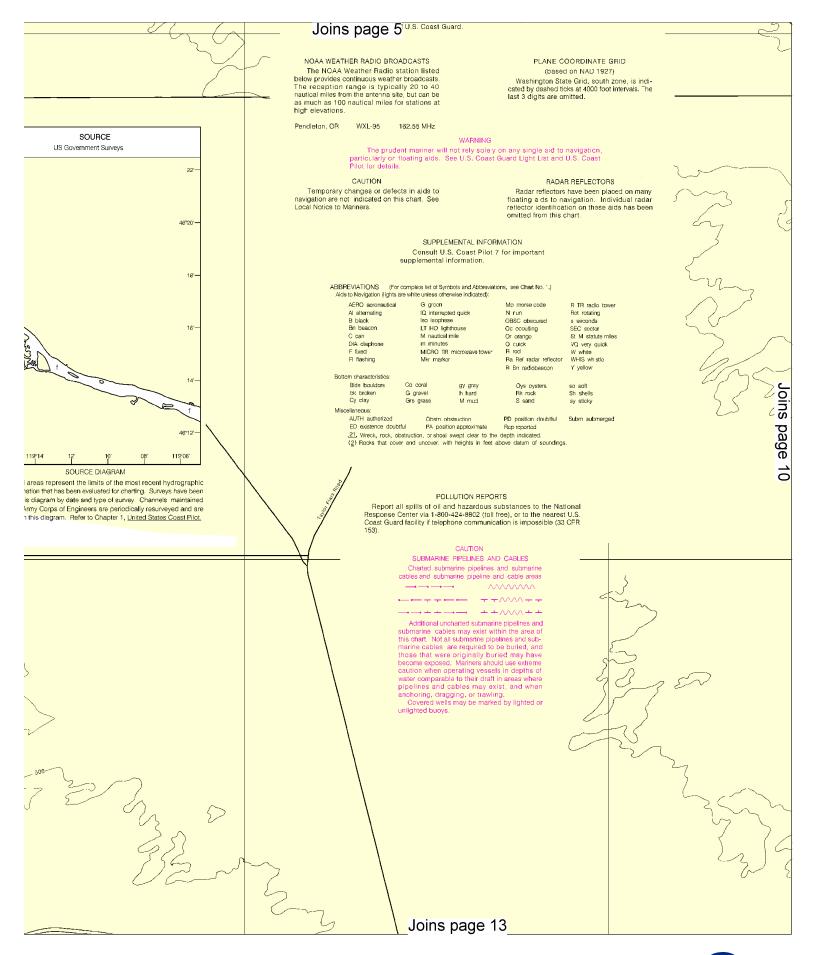


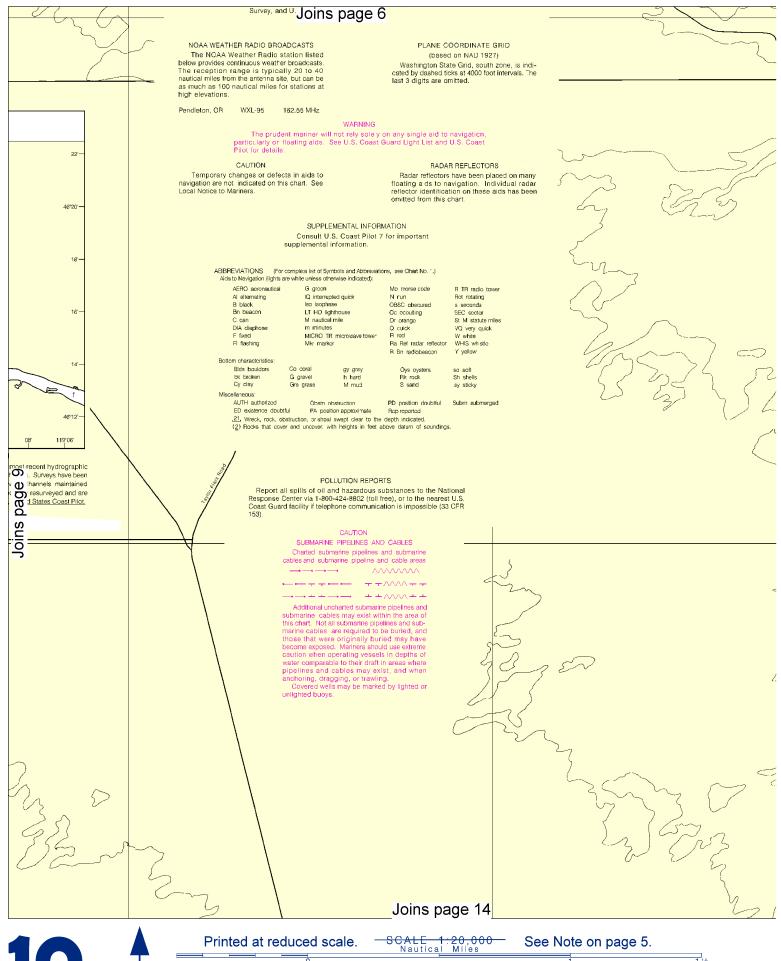






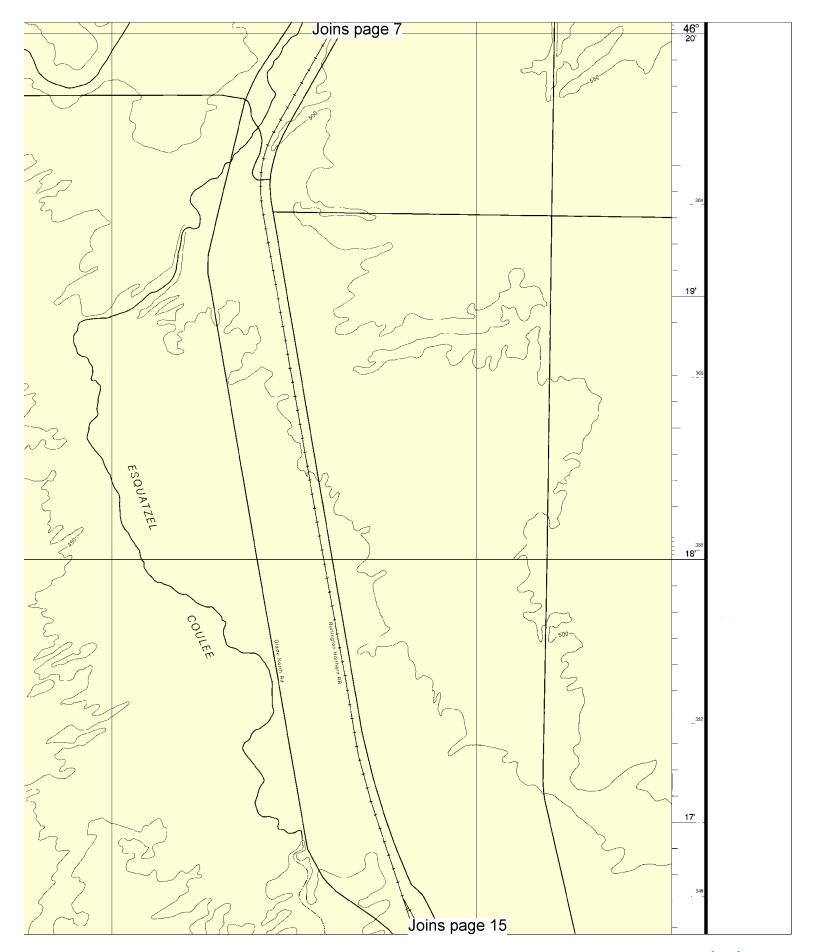


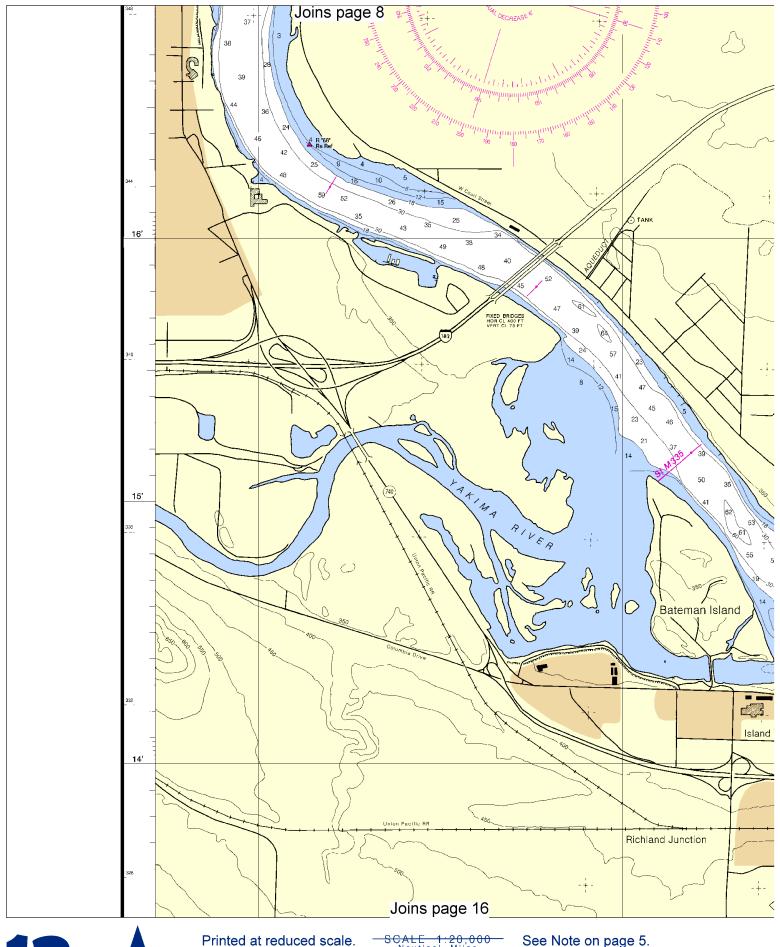




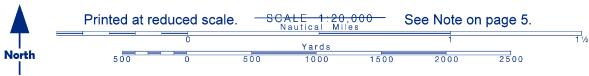


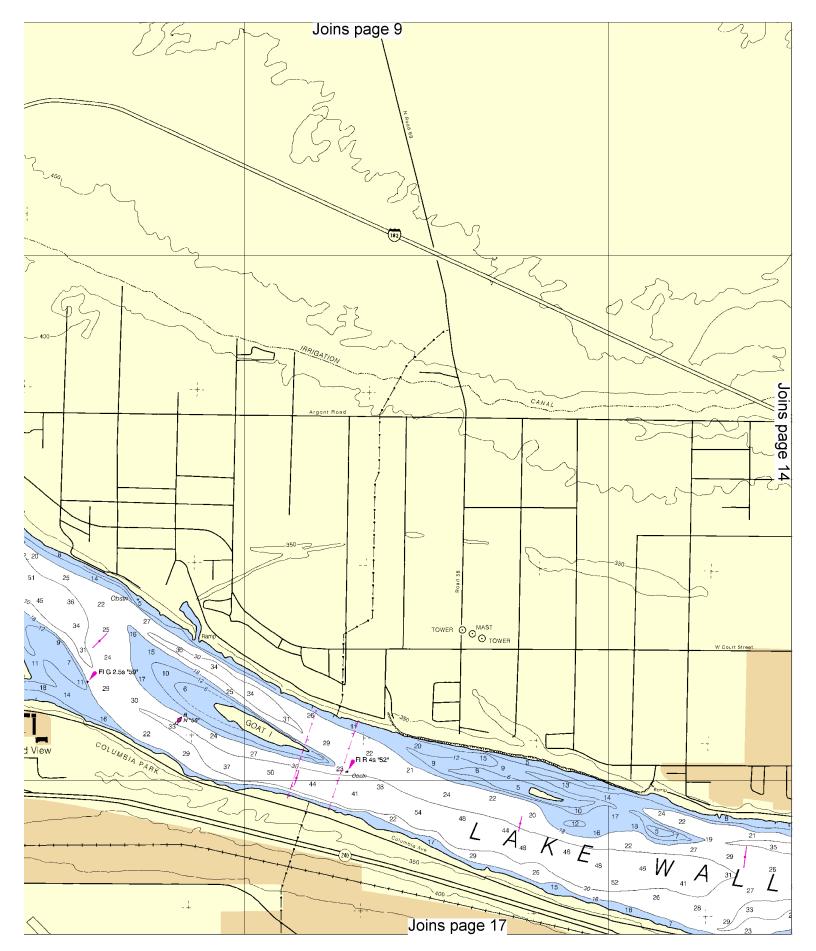


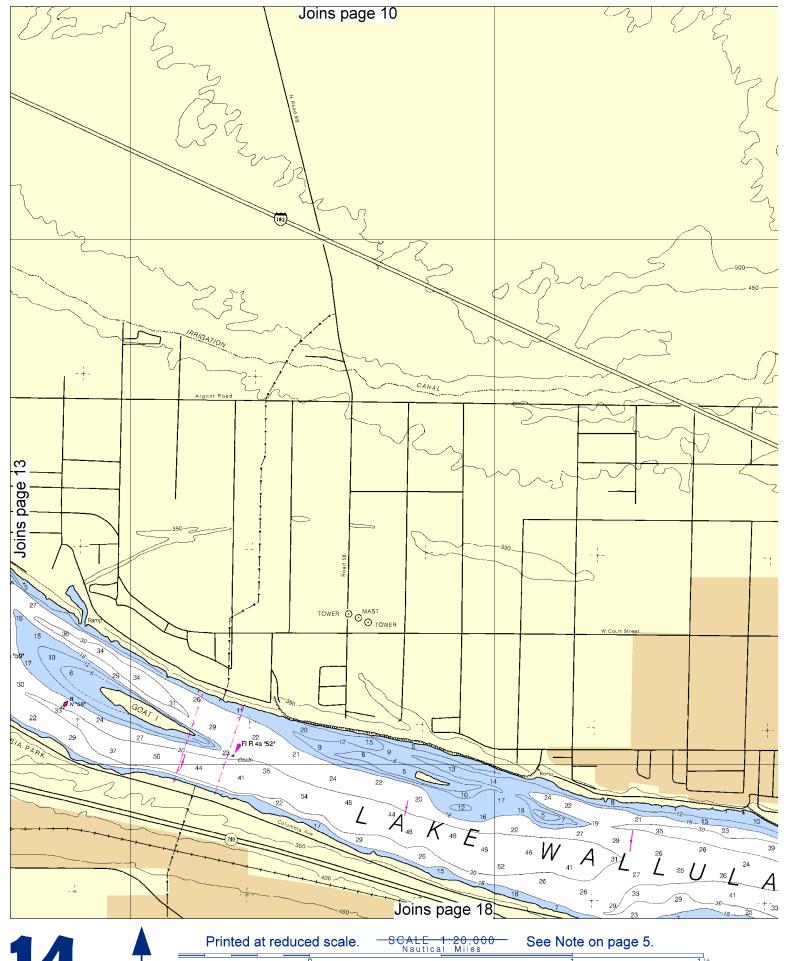


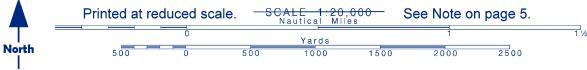


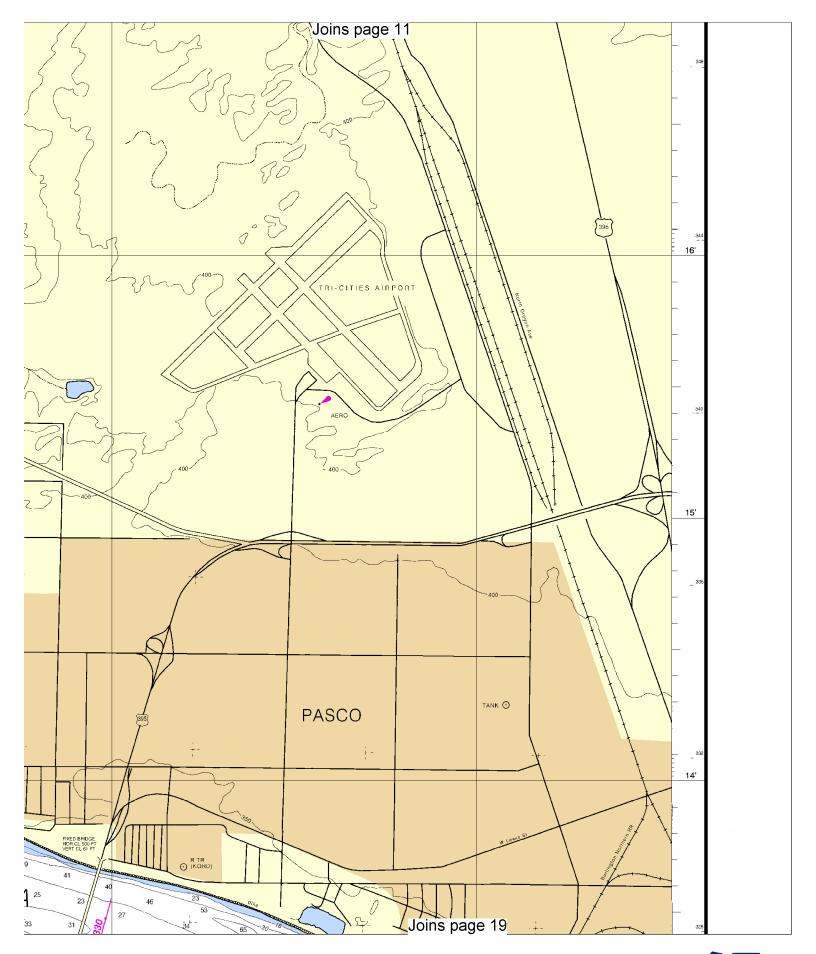


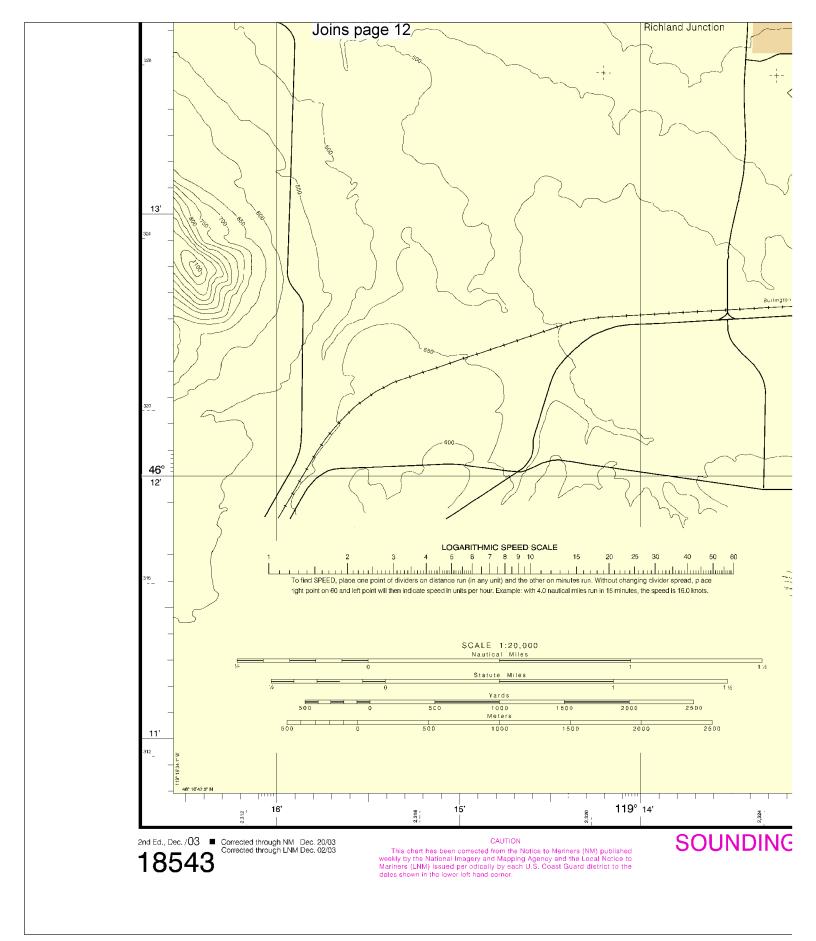






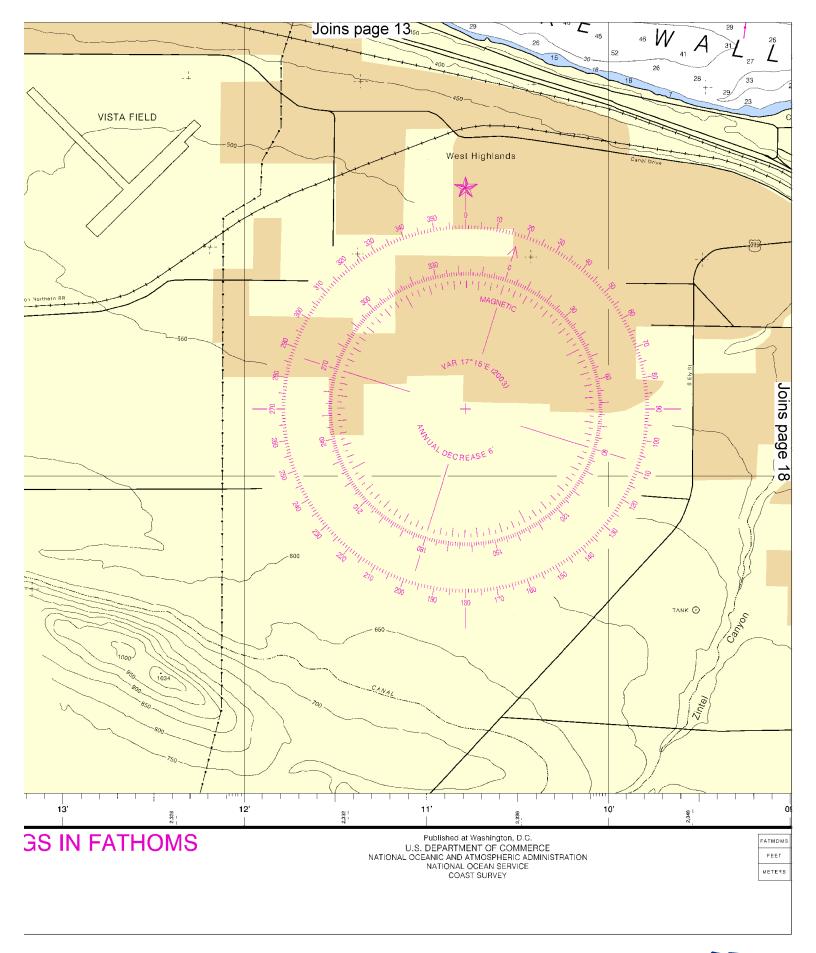


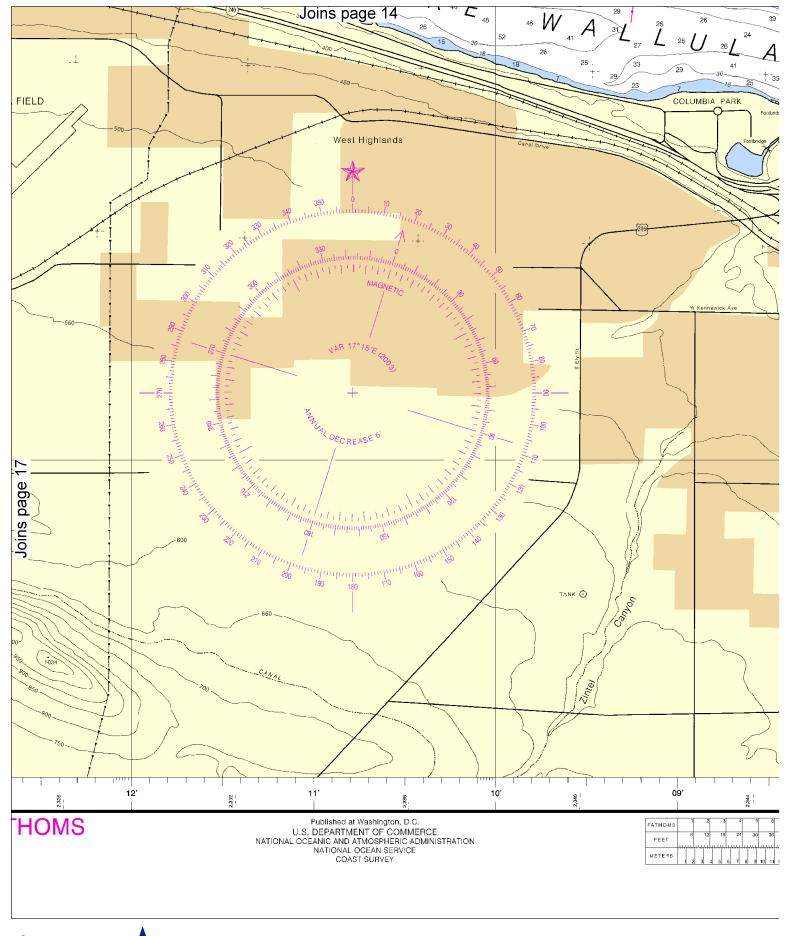






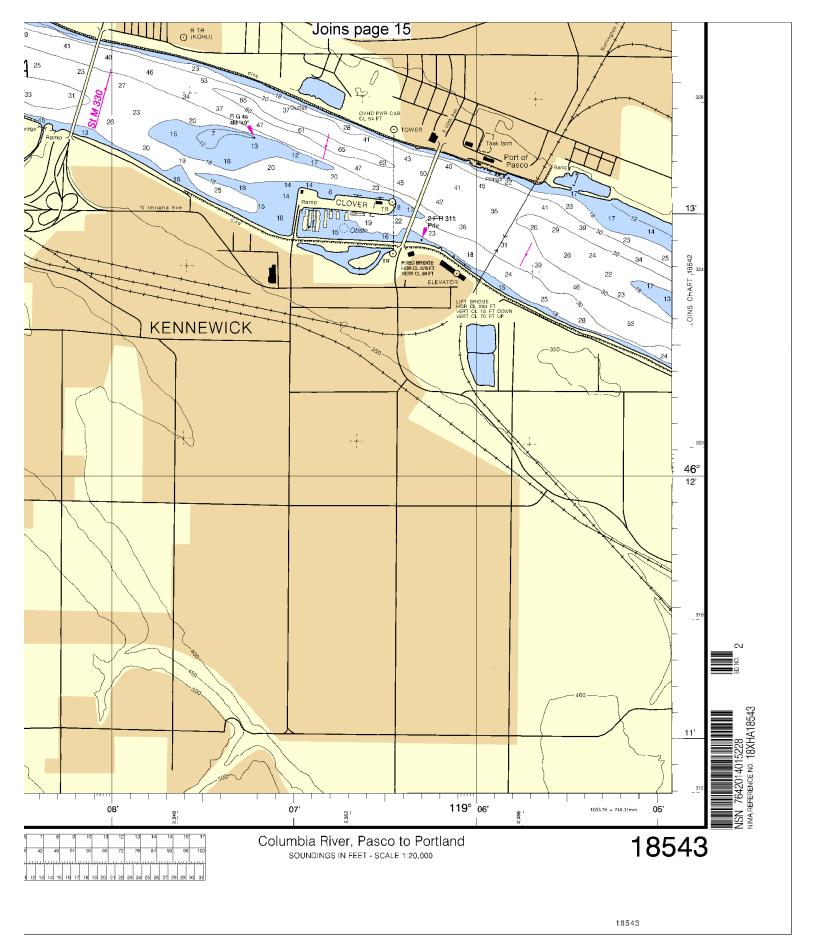












# **EMERGENCY INFORMATION**

# VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

**Channel 13** – Navigation purposes at bridges, locks, and harbors.

# Channel 16 – Emergency, distress and safety calls

to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

**Channel 22A** – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

### **Distress Call Procedures**

- 1. Make sure radio is on.
- 2. Select Channel 16.
- 3. Press/Hold the transmit button.
- 4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- 6. Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY Call.

### HAVE ALL PERSONS PUT ON LIFE JACKETS !!

**Mobile Phones** – Call 911 for water rescue.

Coast Guard Search & Rescue – 206-220-7001 Coast Guard Portland – 503-240-9301 Commercial Vessel Assistance – 1-800-367-8222

<u>NOAA Weather Radio</u> – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

<u>Getting and Giving Help</u> – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



# NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at <a href="https://www.oceanGrafix.com">www.oceanGrafix.com</a>.

# Official Electronic Navigational Charts (NOAA ENCs®) -

ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

# Official Raster Navigational Charts (NOAA RNCs<sup>™</sup>) –

RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official BookletCharts<sup>™</sup> – BookletCharts<sup>™</sup> are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is <a href="https://www.NauticalCharts.gov/bookletcharts">www.NauticalCharts.gov/bookletcharts</a>.

Official PocketCharts<sup>TM</sup> – PocketCharts<sup>TM</sup> are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <a href="http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm">http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm</a>.

Internet Sites: <a href="https://www.Noa.gov">www.Noa.gov</a>, <a href="